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AF/0835

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Kaigo Tanaka

Confirmation Number: **8835**

Serial No.: **10/087,790**

Group Art Unit: **2835**

Filed: **March 5, 2002**

Examiner: **Lisa Lea-Edmonds**

For: **A BATTERY PACK FOR AN INFORMATION...** Attorney Docket: **020282**

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date: **February 25, 2004**

Sir:

This paper is in response to the Final Office Action mailed on November 19, 2003. A Notice of Appeal was submitted on February 18, 2004. A check is attached paying the fee for this Brief. A clean copy of the claims is attached as an Appendix. In the event this paper is not timely filed, then this paper is a petition for an appropriate extension of time. The fees for such an extension or any other fees which may be due with respect to this paper may be charged to Deposit Account No. 01-2340.

REAL PARTY IN INTEREST

The real party in interest is Fujitsu Ltd., 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa, 211-8588, Japan.

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RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

The original claims 1-12 were all amended on October 1, 2003. No claims were canceled. All claims 1-12 are rejected.

STATUS OF AMENDMENTS

All amendments are entered.

SUMMARY OF INVENTION

Independent Claim 1. Claim 1 recites

A battery pack detachably connectable to an information processing apparatus, wherein the information processing apparatus has a body part and a display part hinged to the body part at a rear end such that the display part can be opened and closed against the body part,

which is typified by a laptop or notebook computer (“information processing apparatus”) having a body part including electronics, ports, and keyboard, and a display part hinged to the body part at the rear end, that is, the end farthest from the user. Fig. 1, labeled “Related Art,” shows a generic battery pack 10 detached from a body part 21 of a personal computer (specification page 1, line 35 to page 2, line 8). In Fig. 1, and also in Fig. 3 which shows the Appellant’s claimed subject matter, arrow head Y₂ indicates the direction of the “front” end of the computer and arrow head Y₁ indicates the direction of the “rear” end. Fig. 3 shows that the Appellant’s battery pack 40 is detachable from computer body part 61. (The “standard” pack 80 at lower left is not claimed). The honorable Board is referred to the discussion starting at page 6, line 14.

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Fig. 2, labeled as “Related Art” like Fig. 1, shows how the display part 25 is hinged at the rear end to open and close against the body part. Fig. 3 shows the movable display part which is opened away from the body part, as is recited in claim 1 in relation to the instant claims.

To raise the display part, the user inserts a finger under the front edge and pulls up. In the related-art computer shown in Fig. 2, the battery pack 10 obstructs the user's finger (page 2, lines 20-30). The Appellant's subject matter overcomes this problem. This discussed below.

Claim 1 continues,

... the battery pack comprising:

a housing, including at least one battery compartment to hold at least one battery...

That is, the Appellant's claimed battery pack is not a one-piece, integral unit but a housing which contains distinct batteries. The Appellant's exemplary batteries 42 and 43 are ordinary cylindrical batteries (referred to as “columnar” at page 7, line 21). Fig. 6 shows a first line of batteries 47 and a second line of batteries 48 (described at page 7, line 29). These lines of batteries are housed in first and second battery line housing parts 49 and 50, respectively, and the second (frontmost) housing part is longer than the first (page 8, lines 4-13 and Fig. 5). The battery lines are recited in dependent claim 6. Dependent claim 2 recites that the battery compartment holds plural batteries.

Claim 1 concludes,

wherein an exterior of the housing comprises a hollow situated at a position under a front end portion of the display part when the display part is closed against the body part.

The claimed hollow is shown in Figs. 5 and 6, labeled by numeral 51. The Appellant's specification explains (page 8, line 14),

The housing 41 has a configuration fitting a configuration of the batteries. The first battery line housing part 49 has a configuration of a part of a cylinder. The second battery line housing part 50 has a substantially cylindrical configuration. The upper surface 45 of the housing 41 has a hollow part 51 having a full length of the housing 41 in the X1-X2 direction ...between the first battery line housing part 49 and the second battery line housing part 50.

The honorable Board is invited to note that the text above recites two features: a hollow, and a position of the hollow under the edge of the display part when it is closed. These two features together provide an advantage. The advantage of the hollow 51 together with its position is explained starting at page 9, line 6, referring to Fig. 7:

... the hollow part 51 faces the front end part 70 of the liquid crystal display part 64. Accordingly, when the operator hangs and pulls up the front end part 70 of the liquid crystal display part 64 with the fingertip part 30 ... the fingertip part 30 enters to the hollow part 51. As a result, the front end part 70 of the liquid crystal display part 64 is easy to be hung with the fingertip part 30, as shown in FIG. 7. Therefore, ... it is not necessary to force to enter the fingertip part 30 into a position between liquid crystal display part 64 and the high capacity battery pack 40. Hence, it is possible to prevent a nail of the fingertip part 30 from being harmed.

Dependent claim 3 recites that the hollow runs a full length of the housing in a width direction parallel to the front edge of the display part (page 4, line 13).

Dependent claim 4 recites that the housing has an upper surface and a lower surface, and a second hollow is situated on the lower surface (page 8, lines 24-30).

Dependent claim 5 recites that the hollow comprises a curved configuration in cross section (Fig. 6).

Dependent claim 6 recites the first and second battery lines, columnar batteries, and the hollow being situated between the first and second battery line housing parts (Fig. 6 and page 4, line 30).

Independent Claim 7. Claim 7 generally recites the same features that are recited in claim 1, but claim 1 is directed to a battery pack and claim 7 is directed to an information processing apparatus (e.g., the laptop computer discussed above).

Dependent claims 8-12 follow dependent claims 2-6 but depend from claim 7 instead of from claim 1.

ISSUE

The issue is whether claims 1-12 are obvious, being rejected under 35 U.S.C. §103(a) as being unpatentable over Yoshioka (U.S. Patent 5,677,827) in view of Goto (U.S. Patent D421,244).

GROUPING OF CLAIMS

The honorable Board is requested to consider claim 1 and claim 7 separately, so that these claims do not stand or fall together; this is argued for below.

ARGUMENT: GROUPING OF CLAIMS

Claim 1 is directed to a battery housing, and claim 7 is directed to an apparatus including a battery housing and additional features. The Examiner is giving equal weight to the features recited in claims 1 and 7; if the honorable Board does the same, then these claims may be considered together; if the honorable Board does not, because of claim format, then separate consideration is requested.

ARGUMENT: REJECTION UNDER § 103

Yoshioka is relied upon for disclosing a laptop computer and detachable battery, but is admitted to lack a hollow. The Examiner asserts that it would have been obvious to modify the Yoshioka battery housing to include the hollow disclosed by Goto.

The Appellant argues against the rejection as follows:

(1) Motivation. It cannot be assumed that Goto's battery is used in a laptop computer. However, assuming for argument's sake that Goto *is* to be mounted at the front of a laptop computer, it still would not have been obvious to combine the two references.

Yoshioka's battery case 26 is detachable from the notebook computer 10 (Fig. 1). When mounted, the battery housing portion 32 of the case 26 rotates between a palm-rest typing position and a folded-up carrying position, shown respectively in Figs. 2 and 3 (col. 3, lines 26-43). Fig. 1 shows that the battery housing 32 rotates about an axis I (with rotation indicated by arrows A in Fig. 1), relative to the mounting portions 34 of the case 26 (col. 2, line 66 to col. 3, line 5).

Yoshioka teaches against a fixed battery housing at col. 1, line 19, stating that "since an extra space for housing the battery is required at the front ... the dimension of the keyboard housing in the front-to-rear direction is increased ... the size becomes large, thereby interfering

with the easiness in carrying the personal computer.” Yoshioka also states that when the battery housing is folded up, “computer 10 has a compact shape ... compared to the using state shown in Fig. 2, thereby improving portability” (col. 3, line 39).

Yoshioka also teaches that the shape of the top surface of its battery housing—which is flat—is advantageous. While referring to Fig. 2, Yoshioka states that the battery case “is formed into such a shape that it serves as a palm rest when the operator operates the keyboard ... in Fig. 2, the operator can operate the keyboard easily” (col. 3, lines 27-320).

Goto is a design patent and teaches nothing except appearance, but it appears to be of the type Yoshioka teaches against, because no hinges are visible and it would be fixed in the position of Yoshioka's Fig. 2, if mounted on Yoshioka's computer. Yoshioka teaches against adopting Goto's features, there is no teaching from Goto, and the person of ordinary skill would *not* have replaced Yoshioka's rotatable battery housing with Goto's non-rotatable battery having a hollow.

The Examiner asserts that combination would have been obvious “to make [Yoshioka] more user friendly and ornamentally pleasing.” But Yoshioka actually teaches that Goto's battery would be *less* user friendly, as noted above (“interfering with easiness,” according to Yoshioka).

The Examiner asserted during a telephone interview with the undersigned that the hollow of Goto could be combined with Yoshioka without regard to the other features of Goto.

However, even if the hollow of Yoshioka were taken out of context of the reference, as a disembodied abstract feature, there is *still* teaching against such combination, because Yoshioka also teaches against the hollow itself. As noted above, Yoshioka teaches that its flat surface provides for easy typing; Yoshioka therefore teaches against changing the shape of the upper surface of the battery housing to include a hollow. Again, there is no support for the Examiner's assertion of increased user friendliness.

Furthermore, taking the hollow out of context would be contrary to MPEP § 2141, which, under the heading “BASIC CONSIDERATIONS ...” states, “(B) The references must be

considered as a whole.” If Yoshioka as whole teaches against adopting the features of Goto as a whole, then parsing the references as required to make a rejection would be improper. The person of ordinary skill would not have had any particular interest in the hollow, either for making the Appellant's invention or the Examiner's rejection—no, the person of ordinary skill would have seen that Yoshioka teaches against virtually all of the features of Goto (including the hollow), and would therefore not have combined these references.

As to the asserted gain in ornamental appearance, this is traversed as being based entirely on the Examiner's personal opinion. Even design patents like Goto are not examined based on “pleasing” appearance, but on an appearance that it novel and non-obvious. The Examiner's proposed aesthetic motivation is respectfully submitted to be contrary to proper examination of a patent claim, more especially examination of a utility patent claim.

(2) The Appellant's Advantage. The Appellant's independent claims recite “a hollow situated at a position under a front end portion of the display part when the display part is closed against the body part.” In Yoshioka, the front end of the display portion is even with the end of the computer body in the Y_1 - Y_2 direction: this is shown in Fig. 3. Therefore, even if the hollow of Goto were added to the battery housing of Yoshioka, the hollow would not be under the front end (see Fig. 2). Therefore, even if the references were combined in this particular manner (for the record, not obvious), the claimed subject matter, and the advantage provided by the Appellant, would not result.

(3) The Problem Solved by the Appellant. Neither reference suggests the problem solved by the Appellant (page 2, lines 2-30).

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(4) Battery vs. Housing. Goto is classified in D13, Equipment for Production, Distribution, or Transformation of Energy, subclass 103, Battery or Casing Therefor. According to its classification, Goto *could have* been a battery housing, but instead it appears to be a *battery*; this is recited in the title, claim, and description. There is no sign of any hatches or seams on the Goto battery, it appears to be a single sealed unit. As Goto discloses no battery housing, it cannot disclose a hollow in a battery housing, which is what the Appellant claims. Yoshioka discloses a battery housing, but no hollow, so neither reference discloses a hollow in a battery *housing*.

Yoshioka employs cylindrical batteries 60A, 60B (shown in Figs. 4, 6, and 7) and states that “two rows of the batteries 60A, and 60B are stored in the ... battery case 26” (col. 4, line 26). The single large battery of Goto (this is what the reference discloses) would be difficult or impossible to put into Yoshioka’s housing; this also teaches against combining the references. Any assumption that Goto “really” discloses a housing for cylindrical batteries is just that, an assumption, unsupported on the record.

The honorable Board is requested to overturn the rejection for the reasons above.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,
HANSON & BROOKS, LLP


Nick Bromer (Registration No. 33,478)
(717) 426-1664, voice and fax

Address: Atty. Docket 020282
Armstrong, Kratz, Quintos, Hanson & Brooks, LLP
1725 K Street, NW
Suite 1000
Washington, DC 20006

Tel. No.: Armstrong firm (202) 659-2930, voice; (202) 887-0357, fax

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APPENDIX—CLEAN VERSION OF CLAIMS

1. (original): A battery pack detachably connectable to an information processing apparatus, wherein the information processing apparatus has a body part and a display part hinged to the body part at a rear end such that the display part can be opened and closed against the body part, the battery pack comprising:

a housing, including at least one battery compartment to hold at least one battery, wherein an exterior of the housing comprises a hollow situated at a position under a front end portion of the display part when the display part is closed against the body part.

2. (original): The battery pack as claimed in claim 1, wherein the battery compartment holds plural batteries.

3. (original): The battery pack as claimed in claim 1, wherein the hollow runs a full length of the housing in a width direction parallel to the front edge of the display part.

4. (original): The battery pack as claimed in claim 1, wherein the housing has an upper surface and a lower surface and a second hollow is situated on the lower surface.

5. (original): The battery pack as claimed in claim 1, wherein the hollow comprises a curved configuration in cross section.

6. (original): The battery pack as claimed in claim 2, wherein the housing includes a first battery line housing part and a second battery line housing part in which batteries having column configurations respectively are holdable, wherein the first battery line housing part and the second battery line housing part are situated parallelly in a width direction of the housing, the housing has a configuration fitting configurations of the batteries, and the hollow is situated at a position between the first battery line housing part and the second battery line housing part.

7. (original): An information processing apparatus, comprising:
a body part in which an information processing part for processing information is arranged;

a display part hinged to the body part at a rear end such that the display part can be opened and closed against the body part; and

a battery pack which is detachably connectable to the information processing apparatus and includes a housing, including at least one battery compartment to hold at least one battery, wherein an exterior of the housing comprises a hollow situated at a position under a front end portion of the display part when the display part is closed against the body part.

8. (original): The information processing apparatus, as claimed in claim 7, wherein the battery compartment holds plural batteries.

9. (original): The information processing apparatus, as claimed in claim 7, wherein the hollow runs a full length of the housing in a width direction parallel to the front edge of the display part.

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10. (original): The information processing apparatus, as claimed in claim 7, wherein the housing has an upper surface and a lower surface and a second hollow is situated on the lower surface.

11. (original): The information processing apparatus, as claimed in claim 7, wherein the hollow comprises a curved configuration in cross section.

12. (original): The information processing apparatus, as claimed in claim 2, wherein the housing includes a first battery line housing part and a second battery line housing part in which batteries having column configurations respectively are holdable, wherein the first battery line housing part and the second battery line housing part are situated parallelly in a width direction of the housing, the housing has a configuration fitting configurations of the batteries, and the hollow is situated at a position between the first battery line housing part and the second battery line housing part.